

CLAIMS

1. Soda-lime-silicate glass composition, **characterized in that** it includes the optical absorbents below, in contents varying within the following weight limits:
- | | |
|--|---------------|
| Fe ₂ O ₃ (total iron) | 0.01 to 0.15% |
| V ₂ O ₅ (total vanadium) | 0.11 to 0.40% |
| MnO (total manganese) | 0.05 to 0.40% |
- and in that** the glass has, for a thickness of 3 mm, an ultraviolet transmission T_{UV} , measured between 295 and 380 nm, not exceeding 40% and chromatic coordinates (a^* , b^*) under illuminant C of between -3 and +3.
2. Composition according to Claim 1, **characterized in that** the MnO content is not less than 0.10%, especially 0.13%.
3. Composition according to Claim 1 or 2, **characterized in that** it contains cobalt oxide (CoO) with a content not exceeding 0.0025%.
4. Composition according to one of the preceding claims, **characterized in that** the V₂O₅ content is not less than 0.16%, especially between 0.19 and 0.22%.
5. Composition according to one of the preceding claims, **characterized in that** the glass has, for a thickness of 3 mm, an ultraviolet transmission not exceeding 20%.
6. Composition according to one of the preceding claims, **characterized in that** the glass has, for a thickness of 3 mm, a chromatic coordinate a^* measured under illuminant C of between -2 and 2, preferably between -1 and 1.
7. Composition according to one of the preceding claims, **characterized in that** the glass has, for a

thickness of 3 mm, a chromatic coordinate b^* measured under illuminant C of between 0 and 3.

8. Composition according to one of the preceding claims, **characterized in that** the glass has, for a thickness of 3 mm, a light transmission factor under illuminant C of not less than 70%, preferably not less than 80%.

9. Composition according to one of the preceding claims, **characterized in that** it includes the colouring agents below in contents varying within the following weight limits:

	Fe ₂ O ₃ (total iron)	0.02 to 0.08%
	V ₂ O ₅ (total vanadium)	0.16 to 0.25%
	MnO (total manganese)	0.20 to 0.30%
	CoO	0 to 0.0020%.

10. Composition according to one of Claims 1 to 8, **characterized in that** it includes the colouring agents below in contents varying within the following weight limits:

	Fe ₂ O ₃ (total iron)	0.02 to 0.08%
	V ₂ O ₅ (total vanadium)	0.19 to 0.22%
	MnO (total manganese)	0.13 to 0.18%
	CoO	0 to 0.0010%.

11. Composition according to one of the preceding claims, **characterized in that** the redox state of the glass does not exceed 0.2, preferably does not exceed 0.1.

12. Composition according to one of the preceding claims, **characterized in that** it consists of a glass matrix comprising the following constituents (in percentages by weight):

SiO ₂	64-75%
Al ₂ O ₃	0-5%

	B ₂ O ₃	0-5%
	CaO	5-15%
	MgO	0-10%
	Na ₂ O	10-18%
5	K ₂ O	0-5%
	BaO	0-5%.

13. Process for manufacturing a glass having a composition according to Claim 1 and furthermore
10 characterized by an MnO/V₂O₅ ratio of between 1.2 and 1.8, which includes a step of melting the batch mix in a melting furnace, the said batch mix providing all of the oxides in the said composition, and a step of forming the said glass in order to obtain hollowware or
15 flat articles.

14. Process for manufacturing a glass having a composition according to Claim 1 and furthermore characterized by an MnO/V₂O₅ ratio of between 0.5 and
20 1.2, which includes a step of melting part of the batch mix, a step of transporting the molten glass to the forming device, during which step oxides are added to the said molten glass by means of glass frits or agglomerates, all of the vanadium and manganese oxides,
25 or the manganese oxide alone, being added to the composition during this step, and a step of forming the said glass in order to obtain hollowware or flat articles.

30 15. Process according to the preceding claim, **characterized in that** the MnO/V₂O₅ ratio is between 0.8 and 1.2.

16. Glass hollowware formed by moulding, pressing or
35 blowing, **characterized in that** its chemical composition and its optical properties are defined by any one of Claims 1 to 12.

17. Sheet of glass formed by floating on a bath of molten metal or by rolling, **characterized in that** its chemical composition and its optical properties are defined by any one of Claims 1 to 12.

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18. Use of manganese oxide in a glass containing vanadium oxide so as to increase the absorptivity of the said glass for ultraviolet radiation.